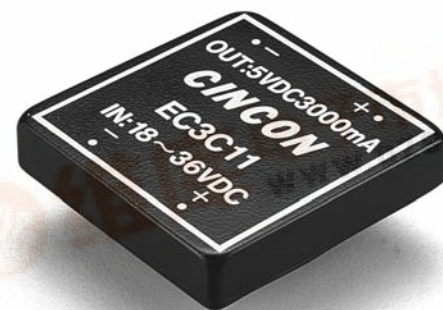


EC3C

15 WATT WIDE INPUT  
DC-DC CONVERTERS

## Features

- 15W Isolated Output
- 2:1 Input Range
- Six-Sided Shield
- 200KHz Switching Frequency
- Efficiency to 82%

| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | INPUT CURRENT NO LOAD | INPUT CURRENT FULL LOAD | % EFF. | CASE |
|--------------|---------------|----------------|----------------|-----------------------|-------------------------|--------|------|
| EC3C01       |               | 5 VDC          | 3000 mA        | 30 mA                 | 1660 mA                 | 75     |      |
| EC3C02       |               | 12 VDC         | 1250 mA        | 30 mA                 | 1625 mA                 | 78     |      |
| EC3C03       |               | 15 VDC         | 1000 mA        | 30 mA                 | 1625 mA                 | 78     |      |
| EC3C04       | 9-18 VDC      | ±12 VDC        | ±625 mA        | 35 mA                 | 1620 mA                 | 77     | C/S  |
| EC3C05       |               | ±15 VDC        | ±500 mA        | 35 mA                 | 1620 mA                 | 77     |      |
| EC3C06       |               | ±5 VDC         | ±1500 mA       | 35 mA                 | 1620 mA                 | 77     |      |
| EC3C07       |               | 3.3 VDC        | 3000 mA        | 30 mA                 | 1178 mA                 | 70     |      |
| EC3C11       |               | 5 VDC          | 3000 mA        | 15 mA                 | 812 mA                  | 78     |      |
| EC3C12       |               | 12 VDC         | 1250 mA        | 20 mA                 | 772 mA                  | 81     |      |
| EC3C13       |               | 15 VDC         | 1000 mA        | 20 mA                 | 772 mA                  | 81     |      |
| EC3C14       | 18-36 VDC     | ±12 VDC        | ±625 mA        | 25 mA                 | 780 mA                  | 80     | C/S  |
| EC3C15       |               | ±15 VDC        | ±500 mA        | 25 mA                 | 780 mA                  | 80     |      |
| EC3C16       |               | ±5 VDC         | ±1500 mA       | 25 mA                 | 780 mA                  | 80     |      |
| EC3C17       |               | 3.3 VDC        | 3000 mA        | 15 mA                 | 557 mA                  | 74     |      |
| EC3C21       |               | 5 VDC          | 3000 mA        | 10 mA                 | 390 mA                  | 80     |      |
| EC3C22       |               | 12 VDC         | 1250 mA        | 15 mA                 | 381 mA                  | 82     |      |
| EC3C23       |               | 15 VDC         | 1000 mA        | 15 mA                 | 381 mA                  | 82     |      |
| EC3C24       | 36-72 VDC     | ±12 VDC        | ±625 mA        | 20 mA                 | 386 mA                  | 81     | C/S  |
| EC3C25       |               | ±15 VDC        | ±500 mA        | 20 mA                 | 386 mA                  | 81     |      |
| EC3C26       |               | ±5 VDC         | ±1500 mA       | 20 mA                 | 386 mA                  | 81     |      |
| EC3C27       |               | 3.3 VDC        | 3000 mA        | 20 mA                 | 271 mA                  | 76     |      |

NOTE: 1. Nominal Input Voltage 12, 24 or 48 VDC

2. Alternative pin-out version. To order, suffix a "S" to the standard model number.

## Specifications

## INPUT SPECIFICATIONS:

|                          |           |         |
|--------------------------|-----------|---------|
| Input Voltage Range..... | 12V ..... | 9-18V   |
|                          | 24V ..... | 18-36V  |
|                          | 48V ..... | 36-72V  |
| Input Filter.....        |           | PI Type |

## OUTPUT SPECIFICATIONS:

|                                                      |  |                                |
|------------------------------------------------------|--|--------------------------------|
| Voltage Accuracy.....                                |  |                                |
| Single Output.....                                   |  | ±1.0% max.                     |
| Dual + Output.....                                   |  | ±1.0% max.                     |
| Dual - Output.....                                   |  | ±3.0% max.                     |
| Voltage Balance Dual Output at Full Load.....        |  | ±1.0% max.                     |
| Transient Response.....                              |  |                                |
| Single 25% Step Load Change.....                     |  | <500μ sec.                     |
| Dual FL-1/2L ±1% Error Band.....                     |  | <500μ sec.                     |
| Ripple & Noise 20MHz BW.....                         |  | 10mV RMS max.<br>75mV p-p max. |
| Temperature Coefficient.....                         |  | ±0.02%/°C                      |
| Short Circuit Protection.....                        |  | Indefinite & Current Limit     |
| Line Regulation <sup>1</sup> Single/Dual Output..... |  | ±0.2% max.                     |
| Load Regulation <sup>2</sup> Single/Dual Output..... |  | ±1.0% max.                     |

## GENERAL SPECIFICATIONS:

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| Efficiency.....                  | See Table                                       |
| Isolation Voltage.....           | 500 VDC min.                                    |
| Isolation Resistance.....        | 10 <sup>9</sup> ohms                            |
| Switching Frequency.....         | 200KHz, typ.                                    |
| Operating Temperature Range..... | -25°C to + 71°C                                 |
| Case Temperature.....            | 100°C max.                                      |
| Cooling.....                     | Free-Air Convection                             |
| Storage Temperature Range.....   | -40°C to + 100°C                                |
| EMI/RFI.....                     | Six-Sided Continuous Shield                     |
| Dimensions.....                  | 2 x 2 x 0.4 inches<br>(50.8 x 50.8 x 10.2mm)    |
| Case Material.....               | Black Coated Copper With<br>Non-Conductive Base |
| Weight.....                      | 57g                                             |

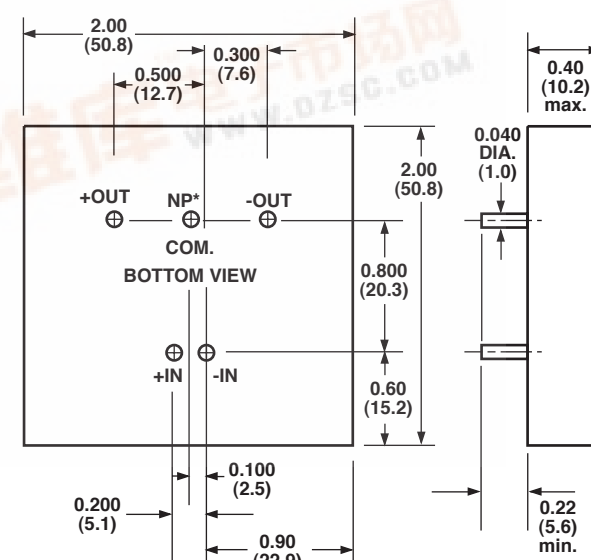
## NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Full Load
3. Determine the Correct Fuse Size by Calculating the Maximum DC Current Drain at Low Line Input, Maximum Load and Then Adding 20 to 25% to Get Desired Fuse Size.
4. Alternative Pin Configuration Suffix "S"

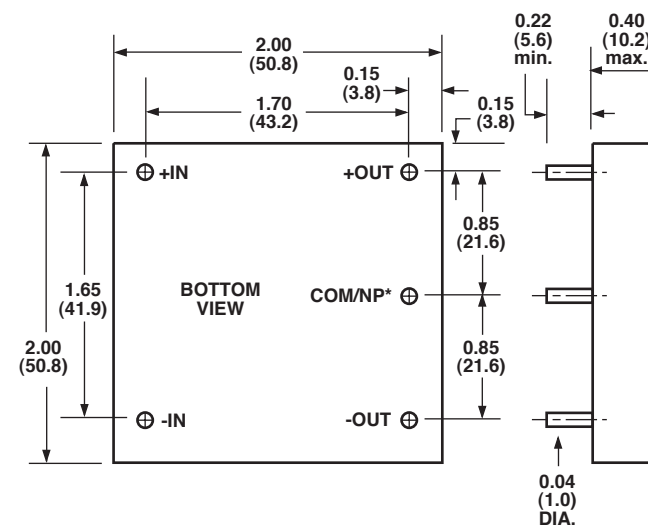
## CASE C

All Dimensions in Inches (mm)  
Tolerance .xx= ±.04, .xxx= ±.010

## STANDARD PIN CONFIGURATION



## ALTERNATIVE PIN CONFIGURATION SUFFIX "S"



\*NP-NO PIN ON SINGLE OUTPUT MODELS